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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,583	07/16/2003	Christian Wachter	GKNG 1160 PUS	8891

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EXAMINER

PANG, ROGER L

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,583

Applicant(s)

WACHTER ET AL.

Examiner

Roger L Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 15 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10-12, 14 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The following action is in response to the amendment filed for application 10/620,583 on November 23, 2004.

Election/Restrictions

Claims 5 and 16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on July 14, 2004.

Drawings

Please note: if claim 5 should be rejoindered, the limitations within that claim are not shown in the present drawings.

Claim Objections

Claim 1 is objected to because of the following informalities: on the last line, "(13,19)" should be replaced with --(18,19)--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 8, 11-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Griffith '926. With regard to claim 1, Griffith teaches a differential drive comprising: a drive housing 6 in which a differential carrier 22 is rotatably supported around its longitudinal axis;

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sideshaft gears 31 which are supported so as to be rotatable around said longitudinal axis relative to the differential carrier; and differential gears 26 which are supported in the differential carrier rotatably around axes extending radially relative to the longitudinal axis, said differential gears engaging the sideshaft gears and rotating together with the differential carrier (Fig. 2), wherein the differential carrier forms journals 24 which extend co-axially relative to the longitudinal axis and by means of which the differential carrier is rotatably supported in the sideshaft gears; wherein the sideshaft gears are rotatably supported in the drive housing (Fig. 2); wherein the sideshaft gears are directly connected to outer joint parts 35 of constant velocity joints; and wherein pre-assembled modules each consisting of a sideshaft gear 31, an outer joint part 35 of a constant velocity joint and a rolling contact bearing 44 are insertable into the drive housing.

With regard to claim 2, Griffith teaches the drive, wherein the sideshaft gears are supported by rolling contact bearings 44 in the drive housing. With regard to claim 3, Griffith teaches the drive, wherein the regions of tooth engagement between the sideshaft gears and the differential gears are located outside the differential carrier (Fig. 2). With regard to claim 6, Griffith teaches the drive, wherein the differential gears are inserted into axial broken-out regions in a radial disc member (Fig. 6), said radial disc member adapted to secure a ring gear 19 in the differential carrier. With regard to claim 8, Griffith teaches the drive, wherein rolling contact bearings 44 are axially fitted between the sideshaft gears and the outer joint parts (Fig. 2). With regard to claim 11, Griffith teaches the drive, wherein outer bearing races 45 of angular contact bearings 44 have an inner diameter greater than the outer diameter of the outer joint parts 35, so as to be axially slipped over the outer joint parts (Fig. 2). With regard to claim 12, Griffith teaches the drive, wherein the rolling contact bearings are angular contact roller bearings (Fig. 2). With

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regard to claim 14, Griffith teaches the drive, wherein effective lines of load of the rolling contact bearings pass through bearing regions of the differential carrier in the sideshaft gears approximately axially centrally (Fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffith as applied to claim 1 above, and further in view of Arnold. Griffith teaches the drive, wherein the journals are integrally connected to one another, but lacks the teaching wherein said journals are hollow. Arnold teaches a differential, wherein support journals (Fig. 1) of a carrier for sideshaft gears 18/20 are hollow. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Griffith to employ hollow journals in view of Arnold, in order to save on weight.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griffith as applied to claim 7 above, and further in view of Szalony. Griffith teaches the drive wherein the sideshaft gears are rotatably connected to the outer joint parts (Fig. 2). Griffith lacks the teaching of said connection being a weld. Szalony teaches a differential, wherein means for connection include methods such as welding (Col. 4). It would have been obvious to one of ordinary skill at the time of the invention to modify Griffith to employ a welded connection in

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view of Szalony in order to ensure a non-rotatable connection, and prevent relative rotation due to wear.

Allowable Subject Matter

Claims 13 and 15 are allowed.

Response to Arguments

With regard to the Griffith reference, applicant argues that Griffith does not teach sideshaft gears being directly connected to outer joint parts of constant velocity joints. Applicant also argues that Griffith does not suggest pre-assemble modules comprising a sideshaft gear, an outer joint part and a rolling contact bearing. Finally, applicant argues that studs 41 of Griffith add weight and bulk. In Col. 3, Griffith specifically states that part 36 is a universal joint, and sideshaft gear 31 is directly connected to an "outer part" 35 of said universal joint. Also, looking at figure 1, Griffith teaches an assembly comprising: a sideshaft gear 31, outer part of a universal joint 35, and a rolling bearing 44. This designated pre-assembled module assembly is "insertable" into the drive housing 40. The studs, although a part of the Griffith reference, does not affect the legal claims of the present invention. Applicant's arguments have been considered, but are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L Pang
Patent Examiner
Art Unit 3681

January 4, 2005